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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,351	02/16/2007	Ray E. Drumright	63356A	1683

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EXAMINER	
QIAN, YUN	
ART UNIT	PAPER NUMBER
1732	

NOTIFICATION DATE	DELIVERY MODE
03/11/2011	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

FFUIMPC@dow.com

Office Action Summary	Application No.	Applicant(s)	
	10/579,351	DRUMRIGHT ET AL.	
	Examiner	Art Unit	
	YUN QIAN	1732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 January 2011*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,6,7,14,15,18 and 19* is/are pending in the application.

4a) Of the above claim(s) *16-17, 22, 24-33* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,6,7,14,15,18 and 19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election of Group I amended claims 1, 6-7, 14-15, and 18-19, in the reply filed on January 28, 2011, is acknowledged.

The instant application is obvious to the prior art of Schile et al. (US 2003/0187155) and therefore discloses the shared/corresponding technical feature such as polyol (claim 1).

Since the shared/corresponding technical feature is disclosed by the prior art, that the shared/corresponding technical feature does not provide a contribution over the prior art. Further, because PCT Rule 13. 2 states that a lack of unity exists when the shared/corresponding technical features do not provide a contribution over the prior art, and because the examiner has disclosed references which teach this special technical feature, a proper assertion has been made that there exists lack of unity.

The claims 16-17, 22 and 24-33 are withdrawn from consideration. Claims 2-5, 8-13, 20-21 and 23 have been cancelled.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 14 and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 14 recites the limitation "the compound having an aldehyde moiety and an epoxide reactive moiety". There is insufficient antecedent basis for this limitation in the claim. For purposes of the examination, claim 14 is interpreted as "the compound having an epoxide moiety".

Claim 19 recites the limitation "in step (a)". There is no any reaction step in the preceding independent claim. For purposes of examination, the limitation of "step (a)" is not considered.

Appropriated corrections are required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 6-7, 14-15 and 18-19 are rejected under 35 U.S.C. 102 (a) and 102 (e) as being anticipated by Schile et al. (US 2003/0187155).

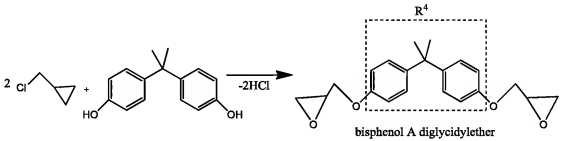
Regarding claim 1, Schile et al. teaches a method of produce a hardened epoxy resin comprising steps of (a) obtaining a Schiff base adduct by reacting salicylaldehyde (corresponding to applicants' a compound containing a hydroxy moiety and an aldehyde

moiety) with 1 equivalent of N,N-(di-alkylamino)-3-propylamine such as N,N-diethyl-3-aminopropylamine (corresponding to applicants' a compound containing a primary amine and one tertiary amine moiety), (b) combining with an epoxy resin (corresponding to applicants' a compound containing at least one epoxy moiety)([0046] –[0177]):, claim 1).

Product-by-process limitation in this claim is noted. It is considered while the product of the reference is made by a different process, the product made and disclosed is the same as being claimed. see "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." (In re Thorpe, 227 USPQ 964,966). Once the Examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious different between the claimed product and the prior art product (In re Marosi, 710 F.2d 798, 802,218 USPQ 289, 292 (Fed. Cir. 1983), MPEP 2113).

Regarding claim 6, as discussed above, Schile et al teaches N, N-diethyl-3-aminopropylamine ([0046]), which meets the claimed formula, wherein R^8 is - $(CH_2)_3$-, R^9 is ethyl group.

Regarding claims 14 and 18, biphenol A diglycidylether taught by Schile et al. is the reaction product of epichlorohydrin and dihydric phenol, which meets the claimed limitation as shown below ([0116]):



bisphenol A diglycidylether

Regarding 15, as discussed above, Schile et al. teaches salicylaldehyde as the recited claims.

Regarding claim 19, Schile et al. teaches ethylenediamine as the recited claim ([0197]).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

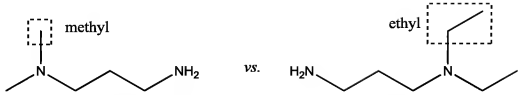
1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schile et al. as applied to claim 1.

As discussed above, Schile et al teaches N,N-diethyl-3-aminopropylamine (col.7, line 11).

Although Schile et al. does not specifically disclose 3-(dimethylamino)-propylamine as per applicant claim 7, the embodiment disclosed by Schile et al. have overall appearances that are basically the same as the instant claim. They are both have the core structure of a primary amine group and one tertiary amine moiety. The only structure difference between the claimed and prior art compound of Schile et al. is that N, N-diethyl-3-aminopropylamine taught by Schile et al. have one additional CH_2 group as indicating below:



claim 7 of the instant application Schile et al.

The prior art compound is true homolog of the claimed compound, the similarity between the chemical structures and properties is sufficiently close that one on ordinary skill in the are would have been motivated to make the claimed compounds in searching for new tertiary amine. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made See MPEP 2144.09 I-III.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YUN QIAN whose telephone number is (571)270-5834. The examiner can normally be reached on Monday-Thursday, 10:00am -4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Melvin Curtis Mayes can be reached on 571-272-1234. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/YUN QIAN/
Examiner, Art Unit 1732

March 8, 2011

/Melvin Curtis Mayes/

Supervisory Patent Examiner, Art Unit 1732